

REMARKS

This amendment is in response to the Examiner's Office Action dated 8/26/2004.

Reconsideration of this application is respectfully requested in view of the foregoing amendment and the remarks that follow.

STATUS OF CLAIMS

Claims 1-19 are pending.

Claims 14-16 stand rejected under 35 U.S.C. § 102(b) as being unpatentable by Kabasawa (USP 6,111,864).

Claim 17 stands rejected under 35 U.S.C. § 102(e) as being unpatentable by Loke (USP 6,728,528).

Claims 1-13, 18 and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Loke and further in view of Muszyniski (USP 5,790,528).

OVERVIEW OF CLAIMED INVENTION

The present invention provides for a mobile communications system in which first and second frequencies are allocated to each wireless communications area. In one embodiment, the system comprises a first base station (provided in a first wireless communications area), a second base station (provided in a second wireless communications area), a third base station (in a third wireless communications area adjacent to the first and second wireless communications areas), a first controller, and a second controller. The first controller accommodates the first base station device and controls communications conducted by the third base station device using the first frequency but does not control communications conducted by the third base station device using the second frequency. Similarly, the second controller accommodates the second base station

device and controls communications conducted by the third base station device using the second frequency but does not control communications conducted by the third base station device using the first frequency.

The present invention also provides for a base station device, located adjacent to a base station using a plurality of frequencies, that shares at least one of the plurality of frequencies. In this embodiment, the device comprises controlling means for performing a soft hand-off process if there is a hand-off from this base station to the adjacent base station when the shared frequency is used, and performing a hard hand-off process between cells using the shared frequency if there is a hand-off from adjacent base station to this base station when a frequency other than the shared frequency is used in the adjacent base station.

In the Claims

REJECTIONS UNDER 35 U.S.C. § 102(b)

The examiner has rejected independent claims 14-16 under 35 U.S.C. §102(b) as being unpatentable by Kabasawa (6,111,864). To be properly rejected under 35 U.S.C. §102(b) and §102(e), each and every element of the claims must be disclosed in a single cited reference. The applicant, however, contends that the presently claimed invention cannot be anticipated in view of the Kabasawa reference.

The examiner cites columns 1-3 of the Kabasawa patent as support for the limitation of "performing a hard hand-off" using the shared frequency if there is a hand-off from the adjacent base station to the current base station. Applicants have amended claims 14 and 15 to clarify that that the present invention relates to a hard hand-off performed when a mobile station moves

from one cell to another cell (i.e., between cells). Applicants respectfully direct the examiner to column 2, lines 59-61, which is reproduced below for the benefit of the examiner:

“FIG. 2 show the connection state between the mobile unit 4 and the base stations 1 and 2 after inter-frequency hand off is executed in the cell of the base station 1.”

It is clear from the above citation and the Kabasawa reference in its entirety that the hand-off, as outlined by Kabasawa, refers to a hand-off performed within a certain cell. By stark contrast, the present invention's hard hand-off, as taught by claims 14-15, is performed between cells.

Hence, applicants contend that independent claims 14 and 15 are neither anticipated nor rendered obvious by the Kabasawa reference.

With respect to claim 16, the examiner uses the same citations as above to assert that the Kabasawa reference provides for the limitation of “controlling, for at least one of the plurality of base stations, only communications conducted using a part of frequencies used by the at least one of the plurality of base stations”. A closer reading of the citations merely mentions a “hand-off method in a CDMA cellular system”, but fails to teach or suggest controlling communications using part of frequencies used by one of the plurality of base stations.

Hence, applicants contend that independent claim 16 is neither anticipated nor rendered obvious by the Kabasawa reference.

REJECTIONS UNDER 35 U.S.C. § 102(e)

The examiner has also rejected independent claim 17 under 35 U.S.C. §102(e) as being unpatentable by Loke (6,728,528). To be properly rejected under 35 U.S.C. §102(e), each and every element of the claims must be disclosed in a single cited reference. The applicant, however, contends that the presently claimed invention cannot be anticipated in view of the Loke reference.

The examiner cites columns 4-5 of the Loke patent as support for the limitations of independent claim 17. The citations and the Loke patent in its entirety, however, fail to disclose a configuration wherein one base station is managed by two controllers, a requirement of independent claim 17. Furthermore, applicants wish to state that claim 17 has been amended, without adding new material, to clarify that the first controller manages the first frequency, but does not manage the second frequency with respect to the mobile station, a limitation that is absent in the Loke reference. Similarly, claim 17 has been amended, without adding new material, to clarify that the second controller manages the second frequency, but does not manage the first frequency with respect to the base station, a limitation that is absent in the Loke reference.

Hence, applicants contend that independent claim 17 is neither anticipated nor rendered obvious by the Loke reference.

REJECTIONS UNDER 35 U.S.C. § 103(a)

The examiner has rejected claims 1-13 and 18-19 under 35 U.S.C. §103(a) as being unpatentable over Loke (6,728,528) in view of Muszynski (5,790,528). To be properly rejected under 35 U.S.C. §103(a), each and every element of the claims must be addressed through known prior art or be recognized as an obvious variation thereof. Applicant contends that the combination of the Loke and Muszynski references fail to provide many of the limitations of applicant's pending claims.

Applicants wish to note that claims 1, 8, 12, and 19 have been amended via the current amendment without adding new material, to clarify that the first controller does not control communications conducted by the third base station device using the second frequency. Similarly, amendments have been made without adding new material to clarify that the second controller does not control communications conducted by the third base station device using the first frequency.

Muszynski teaches a system wherein soft hand-off is performed between base stations BS10 and BS12, and semi-hard hand-off is performed between mobile exchanges MSC1 and MSC2. The described semi-hard hand-off is a network-based hand-off, and it does not interrupt the active CDMA radio communications between the border base station (BS12) and the mobile station (MS). However, Muszynski fails to disclose a first controller that does not control communications conducted by the third base station device using the second frequency and a second controller that does not control communications conducted by the third base station device using the first frequency, both of which are limitations of independent claims 1, 8, 12, and 19.

With respect to claim 11, applicants contend that the Muszynski reference fails to disclose, or render obvious, a third base station device that is accommodated in different controllers for each allocated frequency.

With respect to claim 18, the examiner merely states that the “claim rejected forth same reason as set forth in claim 1”. Applicants contend that the arguments presented with respect to claim 1 substantially apply to claim 18. In addition, applicants contend that the combination of the Loke and Muszynski references fails to disclose a base station management table for registering base station devices to be controlled for each frequency allocated to corresponding wireless communication area, a limitation that is neither addressed by the examiner nor addressed by the combination of the Loke and Muszynski references.

Hence, applicants contend that independent claims 1, 8, 11, 12, 18, and 19 are not rendered obvious by the combination of the Loke and Muszynski references.

Applicants wish to state that the arguments presented above with respect to independent claims 1, 8, 12, 18, and 19 substantially apply to dependent claims 2-7, 9-10, and 13 respectively as they inherit the limitations of the claims from which they depend. Hence, applicants contend that dependent claims 2-7, 9-10, and 13 are not rendered obvious by the combination of the Loke and Muszynski references.

FUJO 19.465 (100794-00192)
10/080,977

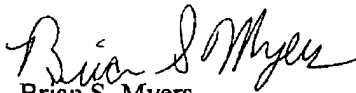
SUMMARY

As has been detailed above, none of the references, cited or applied, provide for the specific claimed details of applicant's presently claimed invention, nor renders them obvious. It is believed that this case is in condition for allowance and reconsideration thereof and early issuance is respectfully requested.

This Amendment is being filed with a petition for extension of time. The Commissioner is hereby authorized to charge the Petition fee, as well as any deficiencies in the fees provided to Deposit Account No. 50-1290.

If it is felt that an interview would expedite prosecution of this application, please do not hesitate to contact applicant's representative at the below number.

Respectfully submitted,


Brian S. Myers
Registration No. 46,947

575 Madison Avenue
New York, NY 10022
(212) 940-8703
December 23, 2004